

Appln. No. 09/744,363  
Amendment dated May 5, 2004  
Reply to Office Action of November 6, 2003

Amendments to the Claims:

Please amend claim 1 as follows. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended). An epitaxial growth furnace comprising:

a sealed chamber; ~~and~~

a pair of wafer holders for holding a pair of semiconductor  
5 wafers within said chamber; and  
means for rotating each of said wafer holders within said  
chamber,

wherein formation of an epitaxial layer on a surface of each  
of said wafers is effected by supplying under a high temperature  
10 condition a source gas to a surface area of each of said wafers;

wherein said wafer holders are rotatably supported at the  
peripheral thereof within said chamber and adapted to arrange  
said pair of wafers in such a manner that the wafers are disposed  
in mutually opposing positions with each said surface area

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15 adjacent to and parallel with each other so that a reaction  
chamber is formed between said wafers;

wherein said surface areas are subject to epitaxial growth  
within said reaction chamber;

wherein each of said wafer holders comprises:

20 an opening for exposing one of said surface areas of  
the wafers to said reaction chamber;

an opening flange adapted for engagement with a  
chamfered tapered face of a whole peripheral edge of one of said  
wafers on a side of said surface area thereof;

25 a plurality of jaws for detachably engaging with an  
outer periphery of one of the wafers on a back surface side of  
said surface area thereof;

a plurality of springs for respectively thrusting said  
jaws toward a center of said opening; and

30 detachable actuating means for locking each of said  
jaws in a released position against respective thrust forces from  
said springs; ~~and~~

wherein said jaws, said springs and said detachable  
actuating means are positioned only on said back surface side of

35 each of said wafers, and

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wherein said means for rotating each of said wafer holders  
comprises:

a rotating fin including a plurality of vanes attached  
onto the outer peripheral of each of said wafer holders; and  
40 rotating gas supply means for blowing a fin rotating  
gas to said vanes to cause said wafers to be rotated about a  
rotation axis along with each of said wafer holders within said  
chamber.

Claim 2 (Previously Presented). An epitaxial growth furnace  
according to claim 1, wherein the opening flange of each of said  
wafer holders is adapted to contact only with the chamfered  
tapered face of the whole peripheral edge of one of said wafers  
5 on the side of said surface area thereof which is subject to  
epitaxial growth.

3. Cancelled

Claim 4 (Previously Presented). An epitaxial growth furnace  
according to claim 2, wherein each of said jaws includes an  
inclined face corresponding to the chamfered tapered face of the

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peripheral edge of one of the wafers on said back surface side

5 thereof.

Claim 5 (Previously Presented). An epitaxial growth furnace  
according to claim 1, wherein said pair of wafer holders are  
adapted for vertical arrangement of said pair of semiconductor  
wafers so that the wafers are placed upright with each wafer  
5 surface vertically arranged in the reaction chamber.